

CLAIMS

1 A data recording/reproducing device adapted for recording and/or reproducing data by the optical recording system with respect to a disc-shaped recording medium,

the data recording/reproducing device comprising:

recording/reproducing means for recording and/or reproducing the data;

deterioration information detecting means for detecting deterioration of the disc-shaped recording medium;

display means for displaying deterioration information of the disc-shaped recording medium; and

control means for performing a control to generate deterioration information indicating deterioration in accordance with the detected deterioration to conduct a display on the display means in accordance with the deterioration information.

2 The data recording/reproducing device as set forth in claim 1,

wherein the deterioration information detecting means detects read error frequency in reading out address information on the disc-shaped recording medium to generate first deterioration information from the read error frequency, and the control means generates second deterioration

information when the first deterioration information is above a predetermined threshold value.

- 3 The data recording/reproducing device as set forth in claim 2,
 wherein address information on the disc-shaped recording medium is
 ATIP (Absolute Time In Pregroove).
- 4 The data recording/reproducing device as set forth in claim 1,
 wherein the deterioration information detecting means detects error
 frequency of data to which a predetermined error correction encoding has
 been implemented and recorded on the disc-shaped recording medium to
 generate first deterioration information from error frequency of the recorded
 data, and the control means serves to generate second deterioration
 information when the first deterioration information is above a predetermined
 threshold value.
- 5 The data recording/reproducing device as set forth in claim 4,
 wherein the error correction encoding is performed by using CIRC
 (Cross-Interleaved Reed-Solomon Code).
- 6 A data recording/reproducing method of recording and/or reproducing
 data by the optical recording system with respect to a disc-shaped recording
 medium,
 the data recording/reproducing method including:
 a deterioration detection step of detecting deterioration of the

disc-shaped recording medium in recording and/or reproducing the data; and
a control step of performing a control to generate deterioration information indicating deterioration in accordance with the detected deterioration to conduct a display on display means in accordance with the deterioration information.

7 The data recording/reproducing method as set forth in claim 6,
wherein, at the deterioration information detection step, read error frequency in reading out address information on the disc-shaped recording medium is detected so that first deterioration information is generated from the read error frequency, and at the control step, second deterioration information is generated when the first deterioration information is above a predetermined threshold value.

8 The data recording/reproducing method as set forth in claim 7,
wherein address information on the disc-shaped recording medium is ATIP (Absolute Time In Pregroove).

9 The data recording/reproducing method as set forth in claim 6,
wherein, at the deterioration information detection step, error frequency of data to which a predetermined error correction encoding has been implemented and recorded on the disc-shaped recording medium is detected, and, at the control step, first deterioration information is generated from error frequency of the recorded data, and second deterioration

information is generated when the first deterioration information is above a predetermined value.

- 10 The data recording/reproducing method as set forth in claim 9,
 wherein the error correction encoding is performed by using CIRC
(Cross-Interleaved Reed-Solomon Code).
- 11 A digital camera adapted for recording and/or reproducing data by the
optical recording system with respect to a disc-shaped recording medium,
 the digital camera comprising:
 image pick-up means for picking up an image of an object;
 image processing means for processing image data which has been
picked up by the image pick-up means;
 recording/reproducing means for recording and/or reproducing the
image data with respect to the disc-shaped recording medium;
 deterioration information detecting means for detecting deterioration
of the disc-shaped recording medium;
 display means for displaying deterioration information of the
disc-shaped recording medium, and
 control means for performing a control to generate deterioration
information indicating deterioration in accordance with the detected
deterioration to conduct a display on the display means in accordance with the
deterioration information.

- 12 The digital camera as set forth in claim 11,
 wherein the deterioration information detecting means detects read
 error frequency in reading out address information on the disc-shaped
 recording medium to generate first deterioration information from the read
 error, and the control means generates second deterioration information when
 the first deterioration information is above a predetermined threshold value.
- 13 The digital camera as set forth in claim 12,
 wherein address information on the disc-shaped recording medium is
 ATIP (Absolute Time In Pregroove).
- 14 The digital camera as set forth in claim 11,
 wherein the deterioration information detecting means detects error
 frequency of data to which a predetermined error correction encoding has
 been implemented and recorded on the disc-shaped recording medium to
 generate first deterioration information from error frequency of the recorded
 data, and the control means generates second deterioration information when
 the first deterioration information is above a predetermined threshold value.
- 15 The digital camera as set forth in claim 14,
 wherein the error correction encoding is performed by using CIRC
 (Cross-Interleaved Reed-Solomon Code).